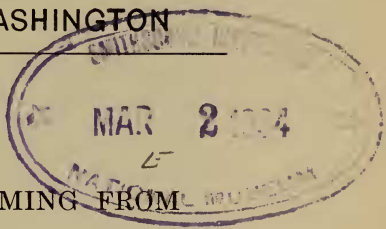


PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

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DESCRIPTION OF A NEW LEMMING FROM  
ALASKA.

BY E. W. NELSON.

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The considerable series of lemmings from island and mainland localities in western Alaska, which has accumulated in the Biological Survey collection during recent years, supplies information helpful toward clearing up some obscure points concerning the relationship between *Dicrostonyx rubricatus* and *D. unalascensis*.

In the Proceedings of the Biological Society of Washington, March 14, 1900, vol. 2, p. 25, Dr. C. Hart Merriam described *Dicrostonyx unalascensis* from Unalaska Island in the Aleutian Chain. His type was a broken skull, one of several taken from owl pellets near the village of Unalaska. Since then unsuccessful efforts have been made by several naturalists to capture some of these lemmings at the type locality, in order that their color and other general characters might be determined. Owl pellets found there, however, have continued to yield skulls until the Biological Survey collection now contains more than 130 of them.

Fortunately from 1920 to 1924, while investigating the reindeer herd of the Biological Survey on Umnak Island, lying across a channel about 6 miles broad from the western end of Unalaska Island, Donald H. Stevenson, of the Biological Survey, located runways of lemmings in a few limited areas on the eastern part of the island, and during the months of November and December in different years, secured a series of 14 specimens of which more than half are adults. All appear to be in full, heavy winter pelage, some having been taken as late as December 14. It is interesting to find that adults and young are in varying shades of nearly uniform brownish gray

pelage, without a trace of the white winter coat so commonly worn by the members of this genus. In addition the claws of the two middle toes on the front feet are dusky horn color, and although slightly enlarged they are much less than one-half the size of the great claw of *rubricatus* and *hudsonius*, in their winter condition. In fact the Umnak Island specimens must be examined closely to determine the existence of any claw development, thus strongly contrasting with the extraordinary winter claws in the species named. A white specimen of young *rubricatus*, about one-fourth grown, taken in December at Chignik on the south coast of the Alaska Peninsula, has the typical winter claw development of that species.

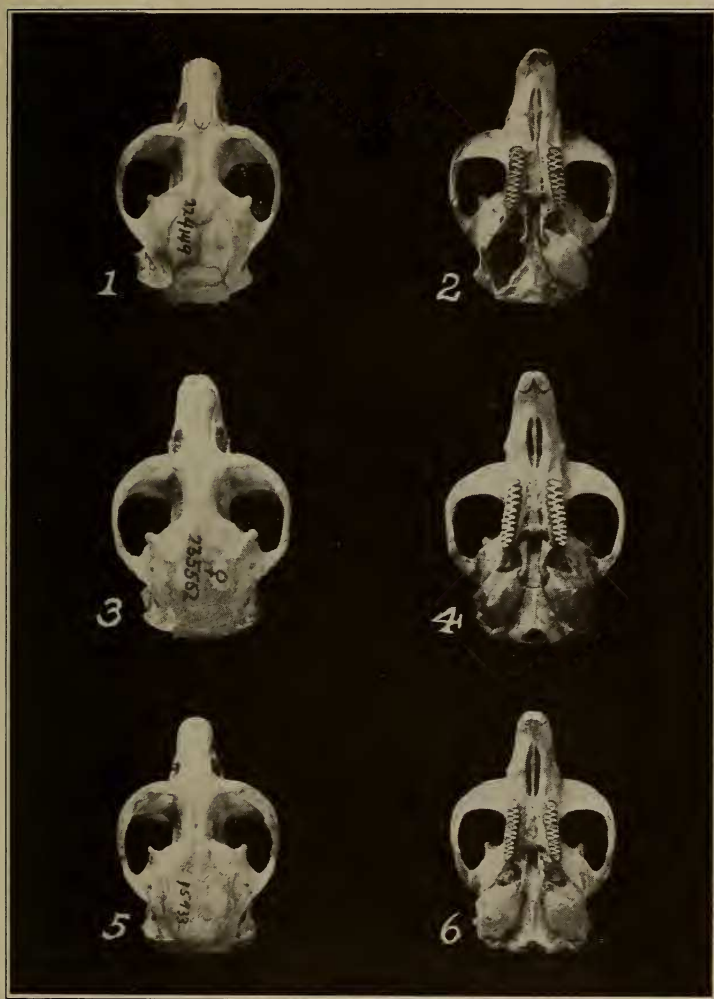
No summer skins from Umnak Island are available to compare with *rubricatus*, but the winter color of the upperparts of the eight adult Umnak Island specimens is in general dingy gray with a slight tinge of buffy brown, overlaid by a very slight wash of reddish on sides and top of shoulders; the underparts are dull buffy or buffy whitish.

The characters given above indicate that we have on Unalaska and Umnak Islands an insular species of lemming, with sufficient differences between the skulls to warrant recognizing the Umnak Island animal as a subspecies of *D. unalascensis*. It should be noted here that three summer specimens of collared lemmings from Unimak Island, adjacent to the western end of the Peninsula of Alaska, in the Biological Survey collection are close to typical *D. rubricatus*, without signs of intergradation toward *D. unalascensis* in size or color.

The retention of a brown pelage in winter by the Umnak lemming, in place of the usual white garb of the other members of the genus *Dicrostonyx*, may be reasonably attributed to the response of this species to the milder winter climate of its habitat. While Umnak Island lies in a very stormy region, yet zero temperatures are uncommon, and while snow falls at intervals during more than six months each year, sometimes remaining on the ground for weeks, yet not infrequently during the winter months the ground lies nearly or quite bare.

This new subspecies is named in honor of the late Donald H. Stevenson, who collected the specimens mentioned here under great difficulties.

Measurements in millimeters.



SKULLS OF DICROSTONYX

[About natural size.]

- Fig. 1-2. *D. unalascensis unalascensis*, Unalaska, Alaska (No. 224149, U. S. Nat. Mus., Biol. Survey coll.).
- 3-4. *D. unalascensis stevensoni* (type), female, Umnak Island, Alaska (No. 235552, U. S. Nat. Mus., Biol. Survey coll.).
- 5-6. *D. rubricatus*, male, Point Barrow, Alaska (No. 15933, Amer. Mus. Nat. Hist.).

